The joint impact of work engagement and burnout on ill-being and turnover intention

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ABSTRACT

In the South African business process services (BPS) industry, a number of variables impact employee's well-being [1]. This study examined the joint impact of work engagement and burnout on ill-being and turnover intention. A quantitative survey yielded a sample of n = 498 from 16 BPS organizations. Polynomial regression and response surface analysis were utilized to analyze the data. Work engagement and burnout can be experienced jointly with ill-being increasing as engagement levels increase toward burnout levels; inversely ill-being decreases when work engagement levels increase as burnout levels decrease. Lower levels of engagement congruent with lower levels of burnout have no statistical significant effect on turnover intention. The findings can be applied to improve BPS human capital and management decisions. The BPS industry leans itself strongly towards Innovation for Value Creation and Beyond through the business benefits it yields – the understanding of employee wellbeing is therefore critical in explaining BPS architecture.

INTRODUCTION

The purpose of this study was to examine the joint impact of work engagement and burnout on ill-being and turnover intention, in the South African business process services (BPS) environment. The BPS industry in an umbrella term that refers organisations that perform "a business process activity either in full or in part" [2, p. 8] such as business process outsourcing (BPO), contact centre services (CCS), information technology outsourcing (ITO), knowledge process outsourcing (KPO) and shared service centres (SSCs) [3], [4] with centralisation benefits of these BPS services [2] [5]. The downside to centralisation as is a range of performance challenges and negative human capital consequences [6], [7], [8].

This present article focuses specifically on burnout and work engagement as predictors of ill-being and turnover intentions, with the view to examine the joint impact of work engagement and burnout on ill-being and turnover intention [6], [9]–[11].

OVERVIEW OF THE LITERATURE

Four of the 44 empirical research BPS human capital and performance related studies detailed in [8]'s exploratory human capital study suggested from that Job Demands-Resources (JD-R) predict employee well-being and burnout [12]–[15]. Turnover intention constitutes a distal outcome that is in turn predicted by aforementioned proximal outcomes. The JD-R Model in this context is an exploratory approach that explains how work related resources (*Job resources* are defined as "initiators of a motivational process"; [16, p. 1]) generate employee engagement, and work related demands (*Job demands* are defined as "initiators of a health impairment process,"; [16, p. 1]) generate wellness issues. Work engagement is operationalized as an independent construct [19], [20] (as apposed to being merely the inverse of burnout [17], [18]) in context of the JD-R model in order to ensure an investigation of scenarios in which employees are low (or high) on both burnout and engagement. Theoretically employees in low demand–low responsibility jobs are not engaged in their work nor burnt out.

Work engagement is defined by [21, p. 74] as "a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption." Vigor denotes "high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence even in the face of difficulties." Dedication is characterized by "the experience of a sense of significance, enthusiasm, inspiration, and pride in connection with one's work." Absorption means "being fully concentrated on one's work, whereby time passes quickly and one has difficulties in detaching oneself from work." The three components constitute proposed opposites of burnout (vigor vs. exhaustion; dedication vs. cynicism; absorption vs. ineffectiveness). No studies were found specifically in BPS literature. Literature generally denotes that employee engagement is a contributor of retention and productivity, customer satisfaction and loyalty, and business growth and profitability [22]–[24].

Burnout is defined by [25, p. 36] as "a persistent, negative, work-related state of mind in 'normal' individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work." [25, p. 36]'s definition expanded on [26, p. 1] initial definition of burnout, stating that burnout is "a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment that occurs among individuals who do people work." BPS related literature notes that job demands expedite burnout in context of the heuristic JD-R Model [12], [13]. Work burnout is the reduced health or energy processes related to job demands [16]. It has been postulated that job resources moderate job demands' effect on stress and burnout [16].

Ill-being is the negative of mental well-being [8] with well-being designated as not just the lack of illness, but a "…state of complete physical, mental and social wellbeing" [27]. It is a state of mental health whereby the employee can struggle to realize untapped abilities, struggle to manage normal stressors, and cannot labor effectively and efficiently, with a diminished ability to contribute to society. Exhaustion correlated with well-being within the BPS environment [28], [29], which, in turn, related to turnover intentions [29]. Note that job demands expedite wellness issues in context of the heuristic JD-R Model [12], [13].

Turnover intention is defined by [30, p. 2], based on [31, p. 262]'s definition, as "... the conscious and deliberate wilfulness to leave the organisation." There is thus a "conation (intention) to distinguish it from the affective (emotion) and the cognitive (knowledge) components of psychological activities" [30, p. 2], with the supposition that intention of behavior is a reliable determinant of the behavior actually occurring, which was empirically confirmed. [30] stated that the JD-R model provides a theory as to why employees may resign, as the pathway from Job Demands leads to burnout and possible resignation. Thus, Job Demands and turnover intention are indirectly related. Work engagement and organizational citizenship behavior correlate negatively with intention to resign, as opposed to burnout and work alienation, which positively correlate with intent to resign [32].

Hypotheses are the following: H_1 Burnout and work engagement are individually and/or interactively related to ill-being; $H_{2\text{-}B}$urnout and work engagement are individually and/or interactively related to turnover intention. Following the above review, four research questions are posed: How does the joint effect of work engagement and burnout impact, linearly and curvilinearly, ill-being when the two predictor variables are (Q_1) congruent and (Q_2) incongruent; and similarly for turnover intention, when the predictors are (Q_3) congruent and (Q_4) incongruent?

RESEARCH DESIGN

Approach. A census-based cross-sectional design with an online questionnaire was followed.

Sampling and participants. The final sample comprised 498 respondents across 16 BPS organizations in South Africa. Participants were predominantly female (67.10%) with only 3.40% of respondents not indicating their sex. The majority of the sample (50.20%) only completed secondary school, with 17 individuals not indicating their level of education. The mean age, reported by only 428 respondents, was 29.52 (SD = 7.45) ranging between 18 and 59 years. Mean tenure was 3.91 years (SD = 5.25) (excluding 76 cases with nonresponses).

Measuring instruments. *Work engagement* was measured with the shorter 9-item version (UWES-9) [36]. *Burnout* was measured with an abbreviated 6-item version of the Maslach Burnout Inventory [37]. *Ill-being* [8] was a one factor solution comprising nine items with factor loadings ranging between .427 and .806 (KMO = .890, $\chi2(36) = 2083.818$, $p < .001$). *Turnover intention* was measured with an adapted 6-item [30] of the original 15-item [38]. Seven-point response scales were used for all instruments, where 1 and 7 signified "low" and "high" levels respectively.

Analyses. Maximum likelihood imputation [39], were used for the scales only to avoid the impact of listwise deletion. For ease of interpretation [40], [41], all variables were mean-centered [40]. The impact on ill-being (Q_1 and Q_2) and turnover intention (Q_3 and Q_4) were modeled using polynomial regression[1] and response surface analysis (RSA) [42], [43] proposed for incommensurable predictors [40]. The R [44] package RSA [45] was used for this purpose. Multivariate outliers (using proposed criteria [46]) were not detected. The best model, considering several candidate models, was selected using Akaike weights [40], [47]. The final models selected were both significant (ps < .001) and had a good model fit (CFI ≥ 0.95) [48], [49].

RESULTS

Descriptive statistics, correlations and reliabilities are reported in TABLE 1. Model parameters and surface plots are presented in TABLE 2 and FIGURE 1 respectively.

TABLE 1: Means (M), standard deviations (SD), and correlations between all study variables.

		1	2	3	4
1.	WE	(.93)			
2.	Burnout	−.48*	(.89)		
3.	Ill-being	−.49*	.67*	(.88)	
4.	TI	−.54*	.55*	.58*	(.70)
	M	4.56	3.71	3.70	4.39
	SD	1.25	1.40	1.30	1.17

n = 498. WE = work engagement; TI = turnover intention. Reliabilities area reported on the diagonal.
*p < .001.

Impact on ill-being. The impact of a *congruence* between the predictors (Q_1, see FIGURE 1A, Line DE) had a significant and linear ($a_1 = 0.35$, $p < .001$) effect on ill-being, indicating an upward slope. This suggests that higher levels of work engagement and burnout are related to higher levels of ill-being, or vice versa. The curvilinear relationship ($a_2 = -0.09$, $p > .05$) was not significant.

When the two predictors were *incongruent* (Q_2, see FIGURE 1A, Line FG), their effect on ill-being revealed a significant negative linear relationship ($a_3 = -0.74$, $p < .001$), indicating a downward slope. This implies that higher levels of work engagement and lower levels of burnout (i.e., the more the discrepancy leans towards work engagement) linearly reduce ill-being. A curvilinear relationship with ill-being was not significant ($a_4 = 0.03$, $p > .05$).

Impact on turnover intention. Results revealed that a *congruence* between the predictors (Q_3, see FIGURE 1B, Line DE) did not have a significant linear ($a_1 = 0.00$, $p > .05$) or curvilinear ($a_2 = 0.00$, $p > .05$) relationship with turnover intention. Therefore, it cannot be concluded that higher levels of work engagement and burnout are related to an increase in turnover intention, or vice versa.

An *incongruence* between the predictors (Q_4, see FIGURE 1B, Line FG) had a significant and negative linear effect ($a_3 = -0.65$, $p < .001$) on turnover intention, indicating a downward slope. This suggests that higher levels of work engagement and lower levels of burnout (i.e., the more the discrepancy leans towards work engagement) linearly decreases the effect on turnover intention. No significant curvilinear relationship ($a_4 = -0.02$, $p > .05$) with turnover intention was evident.

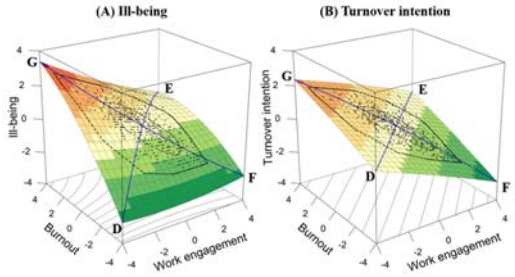
[1] Based on two-variable second-degree polynomial model: $Z = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + e$, where X = work engagement and Y = burnout, and Z = predictor variables (ill-being or turnover intention).

TABLE 2: Parameters for the models predicting ill-being and turnover intention.

	Regression slopes					RSA coefficients			
Model	b_1	b_2	b_3	b_4	b_5	a_1	a_2	a_3	a_4
Ill-being (Full polynomial model. Akaike weight = .35. CFI = 1.00, R^2 = .49, p < .001)									
Est.	−0.19**	0.55**	0.01	−0.06	−0.05*	0.35**	−0.09	−0.74**	0.03
RSE	0.04	0.04	0.03	0.04	0.02	0.07	0.08	0.04	0.02
CI-L	−0.28 to	0.47 to	−0.05 to	−0.14 to	−0.10 to	0.21 to	−0.24 to	−0.81 to	−0.02 to
CI-U	−0.11**	0.62**	0.07	0.02	0.00*	0.49**	0.06	−0.67**	0.08
Turnover intention (Shifted squared difference model. Akaike weight = .29, CFI = 1.00, R^2 = .40, p < 001)									
Est.	−0.33**	0.33**	0.00	0.01	0.00	0.00	0.00	−0.65**	−0.02
RSE	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.04	0.02
CI-L	−0.36 to	0.29 to	−0.02 to	−0.01 to	−0.02 to	0.00 to	0.00 to	−0.73 to	−0.06 to
CI-U	−0.29**	0.36**	0.01	0.03	0.01	0.00**	0.00**	−0.58**	0.03

n = 498. RSE = robust standard errors, CI-L and CI-U = 95% lower and upper percentile bootstrapped (10,000 replications) confidence limits respectively; Est. = estimate; WE = work engagement and BU = burnout.
*p < .10; **p < .001.

FIGURE 1: Response surface analysis plots for ill-being and turnover intention.



DISCUSSION

Based on findings related to ill-being (Q_1), a joint effect between work engagement and burnout had a negative impact on ill-being. This result confirms Hypothesis 1 that posits that burnout and work engagement are individually and/or interactively related to Ill-being. Support for this finding could not be found in the BPS literature, and it is therefore a unique contributor to the BPS literature. Job resources predict work engagement and job demands predict burnout within the BPS environment, with job resources often moderating the impact of job demands on burnout [8], [12]–[15]. And as explained by [19], [20], work engagement and burnout can jointly be high (or low) as its operationalized separately in context of the JD-R model.

The impact of an incongruence between the predictors revealed (Q_2) that ill-being is reduced when levels of work management are lower compared to higher levels of burnout. This is supported theoretically in low demand–low responsibility jobs whereby employees are not engaged in their work nor burnt out [19], [20] such as inbound call center work whereby agents merely provide directory enquiry information.

An incongruence between work engagement and burnout (with high and low levels respectively) (Q_4) reduces turnover intentions. A congruence between the predictors have no effect (Q_3). This result therefore partially confirms Hypothesis 2 that posits that burnout and work engagement are individually and/or interactively related to turnover intention. Support for this finding could not be found in the BPS literature, and it is therefore a unique contributor to the BPS literature.

The following observations are presented: *Firstly*, employees can experience work engagement and burnout at the same time, but the congruence or incongruence between them has diverse effects on ill-being and turnover intention, when high levels are experienced. *Secondly*, Ill-being (i) increases as engagement levels increase toward burnout levels, but (ii) decreases when work engagement levels increase as burnout levels decrease. *Thirdly*, lower levels of engagement congruent with lower levels of burnout reduces ill-being, an intriguing finding, but have no statistical significant effect on turnover intention. *Lastly*, no curvilinear relationships between the two predictors (congruent and incongruent) and ill-being and turnover intention were found.

Practical implications. Managers can utilise the research findings in reducing ill-being by managing work engagement and burnout.

Limitations. The cross-sectional design was a limitation, as it did not provide the control that an experimental design could have provided [50]. Care was taken through prudent survey design and appropriate statistical analysis to mitigate common method variance bias and causal inference. However, correlation designs are still vulnerable to the impact of third variables [51].

Suggestions for future research. More variations in various settings could be empirically assessed in similar and different settings, with Job Demands and Job Resources, burnout and work engagement related constructs combined differently. The sub-dimensions of burnout and work engagement should also be investigated in the future in order to determine co-dependence.

Conclusion. This investigation contributed to a better understanding of how ill-being and turnover intention is influenced by the (dis)agreement between work engagement and burnout.

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